

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently amended): A location information transmission method for reporting on-road location on a digital map,

characterized in that an information provider transmits on-road location information of an event by using road shape data including said on-road location comprising a string of coordinates representing the road shape of a road section and relative data indicating said on-road location in said road section; and

that a party receiving said on-road location information performs shape matching using said road shape data to identify said road section on the digital map and uses said relative data to identify the on-road location of the event in said road section.

Claim 2 (Previously presented): A location information transmission according to claim 1,

characterized in that said method uses a string of coordinates arranging latitude/longitude data of the road point per predetermined distance interval as a string of coordinates representing said road shape.

Claim 3 (Original): A location information transmission method according to claim 1, characterized in that said method uses distance data from a specific point in the road section as said relative data.

Claims 4-9 (Canceled)

Claim 10 (Currently amended): A location information transmission method for reporting on-road location on a digital map,

characterized in that an information provider transmits on-road location information of an event by using road shape data including said on-road location comprising a string of coordinates representing the road shape of a road section; and

that a party receiving said on-road location information performs shape matching using said road shape data to identify said road section on the digital map.

Claim 11 (Previously presented): The location information transmission method according to Claim 10,

characterized in that said method uses a string of coordinates arranging latitude/longitude data of the road point per predetermined distance interval as a string of coordinates representing said road shape.

Claims 12-17 (Canceled)

Claim 18 (Previously presented): An information provision apparatus for providing on-road location information on a digital map by using a location information transmission method according to Claim 10, said information provision apparatus comprising:

a location information converter for converting transmission on-road location information to a road shape data including said on-road location consisting of a string of coordinates representing the road shape of a road section.

Claim 19 (Currently amended): A location information transmission method for reporting location information on a digital map, characterized in that:
an information provider transmits location information of an event using a shape data including a coordinate string; and
a party of receiving side identify said location using said shape data.

Claim 20 (Previously presented): The location information transmission method according to claim 19,
wherein said coordinate string represents a geometrically pattern on a digital map.

Claim 21 (Currently amended): The location information transmission method according to claim 19,
wherein said shape data includes a coordinate string indicating a region including a position on which ~~[[an]]~~ the event occurs.

Claim 22 (Currently amended): The location information transmission method according to claim 19,
wherein said shape data includes a coordinate string indicating a border of a region in which ~~[[an]]~~ the event occurs.

Claim 23 (Previously presented): The location information transmission method according to claim 19,

wherein said shape data includes a coordinate string indicating points at predetermined intervals.

Claim 24 (Previously presented): The location information transmission method according to claim 19,

wherein content of said shape data is changeable in accordance with a situation of a region indicated by said shape data.

Claim 25 (Previously presented): The location information transmission method according to claim 19,

wherein said party of receiving side implements shape matching using said shape data in order to identify the location.

Claims 26-36 (Canceled)

Claim 37 (Previously presented): An information provision apparatus for providing location information on a digital map, by using the method according to any one of claims 19 to 25, said apparatus comprising:

a location information converter for converting a location information to be transmitted to said shape data; and

a transmission section for transmitting said shape data.

Claim 38 (Currently amended): An information transmission method for transmitting location information of an event to a device having a digital map, characterized in that:

said location information includes a shape data having a coordinate string.

Claim 39 (Previously presented): The information transmission method according to claim 38,

wherein coordinates included in said coordinate string are absolute coordinates.

Claim 40 (Previously presented): The information transmission method according to claim 38,

wherein a part of coordinates included in said coordinate string is relative coordinate.

Claim 41 (Previously presented): The information transmission method according to any one of claims 38 to 40,

wherein said coordinate string is a coordinate chain.

Claim 42 (Currently amended): A coding method for coding an object when information regarding said object on a traffic route network is transmitted between an information provider and a party of receiving side, characterized in that:

said object comprises an event;

said object includes at least a coordinate string;

said coordinate string includes a coordinate on a road, wherein at least a part of said road is included in a digital map data of said party of receiving side, and coordinates indicating a shape whose location is capable of being identified at said party of receiving side.

Claim 43 (Previously presented): The location information transmission method according to claim 21 or 22,

wherein said information provider transmits information indicating a type and level of said event, adding to said shape data.

Claim 44 (Canceled)